loosestrife *Lysimachia thyrsiflora,* narrow-fruited water-starwort *Callitriche palustris,* lesser water-plantain *Baldellia ranunculoides,* thread rush *Juncus filiformis* and needle spike-rush *Eleocharis acicularis.* Today the rich diversity of this wetland community is under threat, not only from being overtaken by non-indigenous plant invaders (Mitchell, 2008), but also from a rapid colonisation by the native common club-rush *Schoenoplectus lacustris,* in the last 20 years the species covering more than half of the marshes' open water (Fig. 1a & b).

At least two factors would appear to be involved in the club-rush's recent vigorous performance. In the past cattle played a role in keeping the spread of the club-rush in check, both by grazing the young growth and trampling the plant's exposed rhizomes when the loch level dropped during the summer months. Since 1972 however, when Loch Lomond was impounded as a major water supply for Central Scotland, the raised loch level has limited cattle access to the site. Perhaps of more importance is the club-rush's response to the steady increase in nutrient enrichment known to be occurring in Loch Lomond's southern waters, the problem of chemical imbalance caused by sewage discharge and agricultural fertilisers finding their way into the waterways of the surrounding catchment area (Scottish Environment Protection Agency, 2008).

REFERENCES

Anon. (1897). Excursion report – Balmaha, 8 July 1893. *Trans. Nat. His. Soc. Glas.* 4(NS), 116.

Mitchell J. (2008). Flowering Rush at the Balmaha Marshes, Loch Lomond. *The Glasgow Naturalist* 25(1), 92.

Scottish Environment Protection Agency (2008). *Scotland's Water Environment Review 2000-2006.* SEPA, Stirling.

New records for the red mason bee *Osmia rufa* (Hymenoptera: Apidae) in the west of Scotland.

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According to the latest British atlas, the red mason bee *Osmia rufa* is widely distributed and common throughout much of mainland Britain. Whilst it is found as far north as Fife; it is generally regarded as rare in Scotland and parts of northern England (Else & Roberts, 1998). The few publicly available Scottish records are for the east of the country. It is included in the Scottish Biodiversity List because it is categorised as present in 5 or fewer 10km squares in Scotland (www.biodiversityscotland.gov.uk, 2008); the additional records, detailed below, call its inclusion on this list into question.

The red mason bees are thought to have been active in the west of Scotland since at least spring 2006. A local beekeeper phoned Glasgow Museums for advice on bees nesting in the mortar of a sandstone house in the city. This is a classic nesting site for these kinds of bee, and the source of their common name. His description matched that of red mason bees, but no samples were submitted. One nesting site was in the south west of the city, in Dumbreck (NS5663). This site had a large number of bees nesting along the gable and south wall of the house; a second was in the north east, in Springboig (NS6564) on a south-facing gable (Charles Irwin pers. comm.).

Its presence in the west of Scotland was confirmed following an enquiry from Keith Futter of the Glasgow Naturalist History Society on 7 April 2007; who submitted a number of excellent digital images to Glasgow Museums for identification (see Fig. 1. for an example). The characteristic dense ginger hairs on the body and the horn-like projections on the face of the female were clearly visible in one photograph (www.bwars.com). The bees were living in the mortar of his house in Dumbarton (NS386752). No other nests were found in the area until the next spring. At the beginning of May 2008, images of a solitary bees' nest were submitted by Countryside Rangers at Pollok Country Park for identification. These bees were nesting in a south-facing wall and on a wooden post in the stable yard of Pollok Country Park, Glasgow (NS550615). The mud that they collect to form their nest structures was clearly visible on the wooden post. Red mason bees are known to exploit holes in dead wood as well as masonry to rear their young, and they are one of only two British *Osmia* species to use mud in their nest construction (Else & Roberts, 1998). A male was subsequently collected on 7 May 2008 and the identification confirmed. This specimen has been retained for Glasgow Museums' collection (registered number: Z.2008.26).

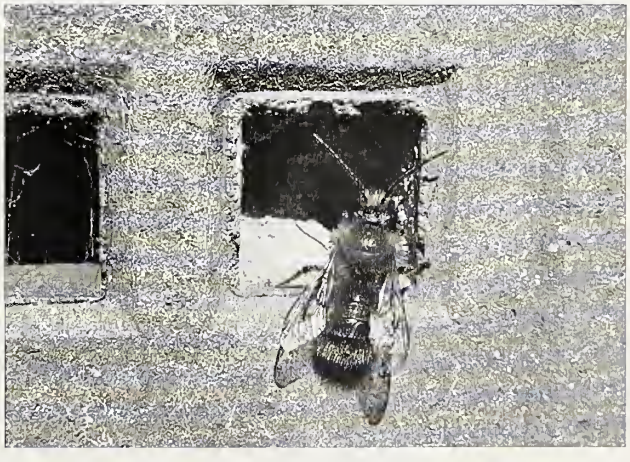

Fig. 1. *Osmia rufa* in Dumbarton, 2007 courtesy of Susan Futter.

It is likely that red mason bees are currently quite widespread in central Scotland. They are now confirmed to be present between Dumbarton in the west , West Lothian in the east, and north up to Kinnaird, Angus (National Biodiversity Network 2008). There are no records yet from Ayrshire, Dumfries and Galloway or the Borders (Murdo Macdonald pers. comm.). Given that the bees are found to the north and south of these counties, and the widespread availability of suitable habitat it is likely that the current distribution reflects a lack of recorders rather than a disrupted distribution. Red mason bees have been growing in popularity as commercial pollinators of gardens and orchards, so any range extension could be assisted by man (Paxton, 2005).

This would help explain a discontinuous distribution, if one does exist. By offering simple nests one can encourage these bees to occupy an allotment or garden. The bees will offer valuable pollination services once established. Nests are available commercially, but it is easy and relatively cheap to make your own. The bees prefer holes in wood or hollow reed stems (i.e. *Phragmites*) to nest in (Wilkaniec & Giejdasz, 2003). The author would be interested to hear of further suspected sightings of red mason bees in Scotland, particularly in the west.

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REFERENCES

Else, G. and Roberts, S. P. M. (1998). Map 110 Osmia rufa. *pp.120-121 In: Edwards, R. (editor)* Provisional atlas of the aculeate Hymenoptera of Britain and Ireland - Part 2. *Henry Ling Ltd, Dorset.*

Paxton, R. (2005). Irish Bee Project – The conservation biology and genetics of Irish Bees. *BWARS newsletter* Autumn 2005, 7-8.

Wilkaniec, Z. and Kiejdask, K. (2003). Suitability of nesting substrates for the cavity-nesting bee *Osmia rufa*. *Journal of ApiculturalRresearch* 42(3), 29-31.

BWARS - Beginners Aculeates: *Osmia rufa* - the Red Mason Bee available at http://www.bwars.com/Osmia_rufa_beginners_aculeate.htm (Accessed 17th November 2008)

NBN (National Biodiversity Network) Gateway – Grid map of records on the Gateway for Red Mason Bee (*Osmia (Osmia) rufa*) available at http://data.nbn.org.uk/gridMap/gridMap.jsp?allDs=1&srchSpKey=NHMSYS0000876504 (Accessed 17th November 2008) The Scottish Biodiversity List - Species & Habitat Detail – *Osmia rufa* available http://www.biodiversityscotland.gov.uk/sbl_detail.php?id=39&type=2&navID=9&pageref=sbl_detail&tvk=NBNSYS0000009762 (Accessed 17th November 2008)

Plants in relation to ox-bows north of the River Kelvin

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To the west of the outskirts of Kirkintilloch the River Kelvin forms the boundary between the vice-counties 77 & 86 (Lanarkshire and Stirlingshire). Within one kilometre of the town there are two ox-bow pools (NS6373) to the north of the river, representing the original channel, before it became straightened out. For recording purposes, the area remains within Lanarkshire. The most northerly arc is within 165 metres of the most northerly part of VC 77 (Fig. 1). A river bend returning almost upon itself is referred to as an ox-bow (an ox-bow being a collar for a yoked ox). An ox-bow pool or lake is formed when the neck is pierced and the bend cut off.

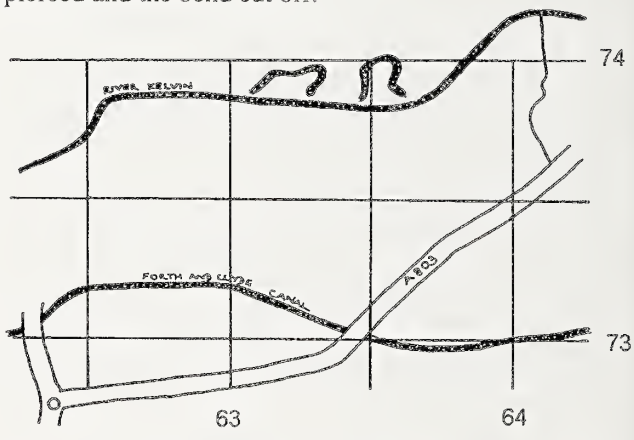

Fig. 1. Ox-bows north of the present course of the River Kelvin (NS6373). Numbers refer to Ordnance Survey Map 1km squares.

In June 2008 we conducted a botanical survey, based on the Lanarkshire half of the pools and the adjacent banks. A total of 105 taxa was recorded. In the easterly pool we found the dominant vegetation to be water horsetail (*Equisetum fluviatile*), while reed canary-grass (*Phalaris arundinacea*) was prolific in that to the west. In general, there is little open water. Valerian (*Valeriana officinalis*) was common on the banks of the pools. Of those in, or at the water's edge, the two species which we found of most interest were greater spearwort (*Ranunculus lingua*) and tufted loosestrife (*Lysimachia thyrsiflora*). Other notables were bogbean (*Menyanthes trifoliata*), mare's-tail (*Hippuris vulgaris*), water plantain (*Alisma plantago-aquatica*), wood clubrush (*Scirpus sylvaticus*) and yellow water-lily (*Nuphar lutea*). Oval sedge (*Carex ovalis*) was on a bank and water (*C. aquatilis*) and bottle (*C. rostrata*) sedges were in the water. Rye-grass (*Lolium perenne*) was dominant in the ground within the arc of the